

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL  
WELL ☐

GAS  
WELL ☒

OTHER

SINGLE  
ZONE ☐

MULTIPLE  
ZONE ☐

2. NAME OF OPERATOR

Lone Mountain Production Company

3. ADDRESS OF OPERATOR

1360 Hwy 6 & 50, Loma Colorado 81524

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*

At surface

1230' FSL, 1896' FWL

At proposed prod. zone

Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

17 miles NW of Mack, Colorado

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any) dr unit: 576'

16. NO. OF ACRES IN LEASE

360

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

320

18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,

OR APPLIED FOR, ON THIS LEASE, FT. 2416'

19. PROPOSED DEPTH

4993

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

6307' GR

22. APPROX. DATE WORK WILL START\*

June 20, 1997

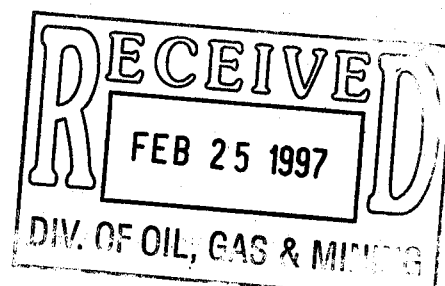
23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	9 5/8"	36	350	190 sx.
8 3/4"	7" **	20	1200	100 sx.
7 7/8"	4 1/2"	10.5	4993	175 sx.

\*\* The 7" casing string will be run only if the well encounters water in the Mesaverde or Castlegate Formations.

The spacing unit for this well is the W $\frac{1}{2}$  of Section 34.



IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

*[Signature]*

TITLE Petroleum Engineer

DATE

2/14/97

(This space for Federal or State office use)

PERMIT NO.

43-019-31359

APPROVAL DATE

APPROVED BY

*[Signature]*

TITLE

Petroleum Engineer

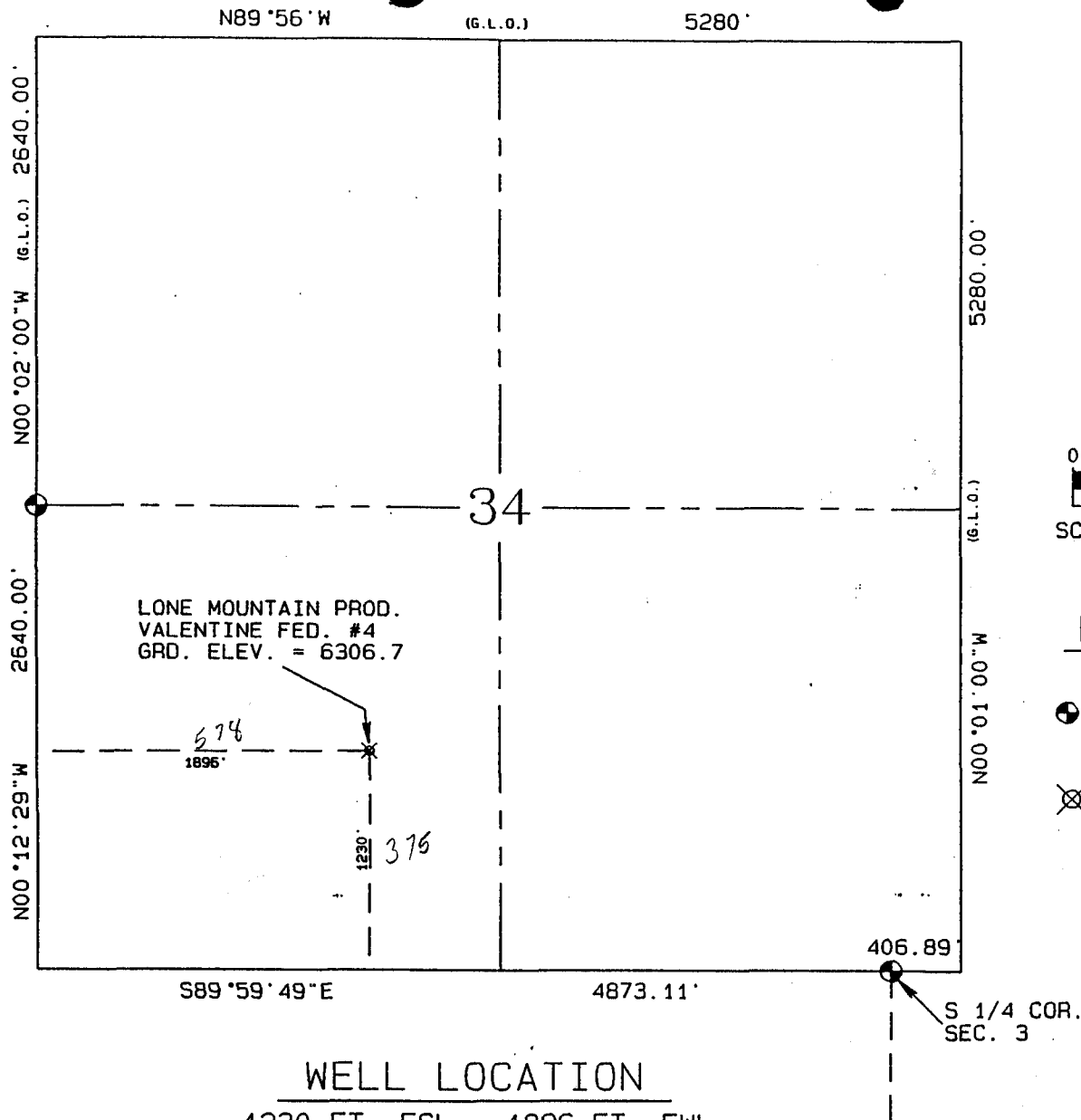
DATE

5/19/97

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

# EXHIBIT 1



## SURVEYOR'S STATEMENT

I, MICHAEL W. DRISSEL, a registered Land Surveyor in the State of Utah, do hereby state that the well location shown hereon was staked on the ground based on existing monumentation and/or physical evidence found in the field and is correct to the best of my knowledge, and belief.

*Michael W. Drissel* 10-12-94  
MICHAEL W. DRISSEL  
No. 6934  
REGISTERED LAND SURVEYOR

D H SPIRREYS INC.

118 OURAY AVE.  
Grand Junction, CO. 81501-6572  
(303) 245-8749

FORM 3160-3 ADDENDUM  
Valentine Federal No. 4  
Section 34, T16S-R25E  
Grand County, Utah

1. SURFACE FORMATION: Mesaverde

2. ESTIMATED FORMATION TOPS:

Castlegate	978'
Mancos	1107'
Dakota Silt	4493'
Dakota Sand	4577'
Morrison	4777'
TD	4993'

3. DEPTH AT WHICH OIL, GAS, WATER OR OTHER MINERAL BEARING ZONES WILL BE ENCOUNTERED:

Gas Zones:	Dakota	4577'
	Morrison	4777'

4. DIRECTIONAL DRILL PROGRAM: N/A

5. CASING PROGRAM: As per Form 3160-3, Item #23

6. PRESSURE CONTROL EQUIPMENT:

See attached Well Control Plan and schematic of contractor's BOP stack. BOP's will be tested before drilling out from under the surface casing and function tested daily. See Exhibit 1 of Well Control Plan.

7. MUD PROGRAM:

Air or mist drilling will be used to drill the surface hole unless water is encountered. If water is encountered, chemical/gel mud will be used. The well will be air drilled from under surface casing to TD.

8. AUXILIARY EQUIPMENT:

A. A kelly cock will be used.

B. A sub with full opening valve will be kept on the derrick floor to stab into the drill pipe when the kelly is not in use.

9. CORING, LOGGING AND TESTING PROGRAM:

- A. No coring is planned.
- B. The logging program will consist of a DIL log from TD to base of surface casing and GR-FDC-CNL logs across the bottom 1000 feet of hole.
- C. No DST's are planned.

10. ABNORMAL DRILLING CONDITIONS

- A. No abnormal pressures or temperatures are expected.
- B. No hazardous gases such as H<sub>2</sub>S are expected.

11. ANTICIPATED START DATES

Spud date:	June 20, 1997
Completed drilling:	June 27, 1997
Completed, ready for pipeline:	August 1, 1997

- 12. Production zones will be perforated, tested and treated as necessary. Gas will be flared during testing. Produced water will be contained in the unlined drilling reserve pit. The extent of treatment of a zone (acidizing and/or fracing) can only be determined after the zone has been tested. A completion program will be furnished after drilling.
- 13. Lone Mountain Production Company's Statewide Bond No. is UT0719

FORM 3160-3 ADDENDUM  
WELL CONTROL PLAN  
Valentine Federal No. 4  
Section 34, T16S-R25E  
Grand County, Utah

1. Surface casing: 9<sup>5</sup>/<sub>8</sub>", 36#, J-55 set @ 350' and cemented back to surface with 190 sacks Class "G" + 3% CaCl<sub>2</sub>.
2. Intermediate casing: Intermediate casing will only be run if water is encountered in the Mesaverde or Castlegate formations. If needed, the intermediate string will be 7", 20#, J-55 set @ 1200' and cemented with 100 sacks Class "G" + 3% CaCl<sub>2</sub>.
3. Casinghead Flange: 9<sup>5</sup>/<sub>8</sub>" x 4<sup>1</sup>/<sub>2</sub>" 600 series casinghead with two, 2", 2000 psi L.P. outlets.
4. Blowout Preventer: The drilling rig is equipped with a 10", 3000 psi W.P. double gate hydraulic BOP with drill pipe rams and blind rams to meet requirements for a 2000 psi stack as indicated in Onshore Order No. 2. All fill, kill and choke lines will be a minimum of 2", 2000 psi W.P. A rotating head will be used while air and mist drilling. A new rubber will be installed before drilling through the Dakota. Pipe rams will be function tested daily and blind rams on each trip when out of the hole. BOP's will be tested to 2000 psi but not more than 70% of the casing burst pressure prior to drilling the shoe joint.
5. Auxiliary Equipment:
  - (a) Drill pipe floats will be allowed at contractor's discretion.
  - (b) Visual monitoring of air returns will be maintained.
  - (c) Upper kelly cock will be used.
  - (d) Stabbing valve will be kept on the rig floor.
6. Anticipated bottom hole pressure is less than 1000 psi, for a gradient of approximately 0.20 psi/ft. No abnormal temperatures or hydrogen sulfide gas are anticipated.

LONE MOUNTAIN PRODUCTION COMPANY

By: \_\_\_\_\_

Joel N. Dyk

Petroleum Engineer

LONE MOUNTAIN PRODUCTION COMPANY  
MULTIPOINT SURFACE USE AND OPERATION PLAN

DATE: February 12, 1997

WELL NAME: Valentine Federal No. 4

LOCATION: 1230' FSL, 1896' FWL, Section 34, T16S-R25E  
Grand County, Utah

FEDERAL OIL & GAS LEASE NO.: U-38276

1. EXISTING ROADS

- A. Maps 1 and 2 indicate existing and new roads to the proposed well. An existing road runs NW from the Bitter Creek road for 1.2 miles to the Valentine Federal No. 2 well.
- B. Route and distance from nearest town or locatable reference point to where proposed access route leaves existing road: From Mack, Colorado, proceed west 8.3 miles on State Highway 6 & 50 to Two Road in Colorado. Turn right on Two Road and proceed northwest 10.2 miles. Turn right up Bitter Creek Road and proceed 1.2 miles to the Valentine Federal No. 2 well.
- C. The existing roads are all weather surfaces and should not require upgrading.

2. PLANNED ACCESS ROAD

From the Valentine Federal No. 2 well, the new access road will proceed south, approximately 3000 feet to the Valentine Federal No. 4 location. (See Map 2)

- A. The proposed 0.57 miles of access road will be constructed with an 18 foot travel width. Total disturbance width will be 30 feet. The topsoil will be windrowed on the west side of the road.

3. LOCATION OF EXISTING WELLS

Map 3 is a one mile radius locating and identifying the following:

- A. Water wells - None
- B. Abandoned wells - None
- C. Temporarily abandoned wells - None
- D. Disposal wells - None
- E. Drilling wells - None

- F. Producing wells - Federal #33-8, Sec. 33, T16S-R25E  
Federal #33-16, Sec. 33, T16S-R25E  
Nicor Federal #2, Sec. 33, T16S-R25E (surface location only)  
Arco Federal D #1, Sec. 34, T16S-R25E  
Valentine Federal #2, Sec. 34, T16S-R25E  
Valentine Federal #3, Sec. 35, T16S-R25E  
Arco Federal C #1, Sec. 35, T16S-R25E  
Wintercamp #3-4, Sec. 3, T17S-R25E  
Hancock Gov't #11, Sec. 4, T17S-R25E  
Hancock Federal #4-11, Sec. 4, T17S-R25E  
Hancock Gov't #10, Sec. 4, T17S-R25E
- G. Shut-in wells - None
- H. Injection wells - None
- I. Monitoring or observation wells for other reasons - None

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

- A. Map 3 is a one mile radius locating the following existing facilities owned by the lessee/operator.
1. Tank batteries - None
  2. Production facilities - Federal #33-8, Sec. 33, T16S-R25E  
Federal #33-16, Sec. 33, T16S-R25E  
Nicor Federal #2, Sec. 33, T16S-R25E  
Arco Federal D #1, Sec. 34, T16S-R25E  
Valentine Federal #2, Sec. 34, T16S-R25E  
Valentine Federal #3, Sec. 35, T16S-R25E  
Arco Federal C #1, Sec. 35, T16S-R25E  
Wintercamp #3-4, Sec. 3, T17S-R25E
  3. Oil gathering lines - None
  4. Gas gathering lines - Various 3½" steel lines
  5. Injection lines - None
  6. Disposal lines - None
- B. Proposed new production facilities, together with relative dimensions are shown in relation to the well pad in Exhibit 2. The production facilities will include a production pit, blowdown pit, separator and metering facility. These facilities will be painted either a dark green or desert tan in accordance with BLM specified colors of the Book Cliffs area. The pit will be located in cut and will contain all water production and will be constructed in accordance with Onshore Oil & Gas Rule No. 7 specifications. All connection work will be done by an oil field service company using standard oil field materials. The water production pit will be fenced with four strand wire to protect livestock and wildlife.

5. LOCATION AND TYPE OF WATER SUPPLY

- A. Water will be obtained from West Salt Wash in Colorado and will be hauled by a certified water hauler along the routes shown on Map 1. No water well will be drilled.

6. SOURCES OF CONSTRUCTION MATERIALS

- A. Exhibit 3, "Cross Sections" indicate the cut and fill requirements for the location.
- B. All affected land is Federal and under the management of the BLM.
- C. Materials other than that on location should not be required to construct the pad.
- D. The access road crosses BLM administered land in Section 34, T16S-R25E.

7. METHODS OF HANDLING WATER DISPOSAL

- A. Drill cuttings will be contained and disposed of in the reserve pit.
- B. Drilling fluids will be contained and disposed of in the reserve pit.
- C. Produced fracturing fluids will be directed to the reserve pit for evaporation.
- D. A portable chemical toilet will be on location during operations.
- E. Garbage and other trash will be placed in a trash bin and removed to a sanitary landfill upon completion.
- F. A flare pit will be fenced with 4 strand wire and flagged to protect livestock and wildlife. The drilling reserve pit will be fenced on three sides during drilling and on the fourth side after the drilling rig moves off location.
- G. When the rig moves off location, all trash and refuse will be removed from the location and hauled to a sanitary land fill. All pits will be filled after drying and the area restored as under Item 10 of this plan.

8. ANCILLARY FACILITIES

No ancillary facilities (camps or airstrips) are planned. A 3" welded steel line will be laid along the access road north to be tied in at the Valentine #2 well. A sundry notice will be submitted prior to commencement of this work.



9. WELL SITE LAYOUT ATTACHMENT AND PROPOSED RIG LAYOUT

- A. Exhibit 4 shows drill pad cross section, rig orientation, parking area, location of mud tank, reserve pit, trash bin, pipe rack and other facilities. The reserve pit will be unlined.
- B. It is proposed to remove existing grass and vegetation from the surface a radial distance of 75 feet from the reserve pit. This will act as a fire barrier in the event gas flaring while drilling is necessary.
- C. Topsoil will be stripped to a depth of 4" and stockpiled on the west side of the location. No topsoil stripping will be done when soils are moisture saturated to a depth of 3" or frozen below the stripping depth.

10. PLANS FOR RESTORATION OF SURFACE

- A. Upon completion of the well, the site will be cleared of all debris and the mouse and rat holes filled. The reserve pit will be dried and backfilled. Disturbed areas of the pad not needed for production facilities will be graded to an appearance consistent with the adjacent natural contours to the extent practicable. These areas will then be covered with topsoil or biodegradable mulch, disked and reseeded with a seed mixture recommended by the BLM. Seed tags will be submitted to the area manager within 30 days of seeding. The seedbed will be prepared by contour cultivating 4-6" deep and drilling seed ½ to 1" deep following the contour. In areas that cannot be drilled, seed will be broadcast at 1.5 times the application rate and covered ½ to 1" deep with a harrow or drag bar. Seeding will be completed after August 15/September 1, 1997 and prior to October 1, 1997, if feasible, but not later than the fall of 1998.
- B. Prior to rig release, pits will be fenced and so maintained until cleanup can be properly done.
- C. If any oil is in the pit, it will be removed or overhead flagging will be installed.
- D. Rehabilitation will commence within 120 days of when drilling and completion operations are completed; approximately August 1, 1997, and will be completed within approximately one year.
- E. If the well is a producer, Lone Mountain will upgrade and maintain access roads as necessary to prevent soil erosion and accommodate year-round traffic. Lone Mountain will reshape areas unnecessary to operation, rip or disk on the contour and seed all disturbed areas outside the work area according to the above seed mixture. The top soil will be saved for use during the final reclamation unless the site can be recontoured to blend with the natural topography as required for the final abandonment. Perennial vegetation will be established. Additional work will be required in case of seeding failures.

- F. If the well is abandoned as a dry hole, Lone Mountain will restore the access road and location to blend with the natural topography. During reclamation of the site, till material will be pushed into cuts and up over the backslope. No depressions will be left that could trap water to form ponds. Topsoil will be distributed evenly over the location and seeding according to the above seed mixture. The access road and location will be ripped or disked prior to seeding.

The area is considered to be satisfactorily reclaimed when:

- A. Soil erosion resulting from the operation has been stabilized.
- B. A vegetative cover at least equal to that present prior to disturbance and a plant species composition at least as desirable as that present prior to disturbance has been established. Establishment of seeded species in the approved seed formula will be considered as acceptance.

Additional work will be required until these conditions are satisfied.

11. SURFACE OWNERSHIP

All lands involving new construction are Federal lands.

Lone Mountain will contact the Grand Resource Area Manager at least 24 hours prior to commencing construction or maintenance of the access road and/or well pad.

Lone Mountain will immediately bring to the attention of the Grand Resource Area Manager any and all antiquities or other objects of historic or prehistoric ruins, artifacts or fossils discovered as a result of operations under this permit. Lone Mountain will immediately suspend all activities in the area of the object and will leave such discoveries intact until told to proceed by the Area Manager. Notice to proceed will be based upon the evaluation of the cultural significance of the object. Evaluation will be by a qualified professional selected by the Area Manager from the federal agency insofar as practical. When not practical, Lone Mountain will follow the mitigation requirements set forth by the Area Manager concerning protection, preservation or disposition of any sites or material discovered. In those situations where the Area Manager determines that data recovery and/or salvage excavations are necessary, Lone Mountain will bear the cost of such data recover and/or salvage operations.

The Grand Resource Area Manager will be notified at least 24 hours prior to commencing reclamation work.

12. OTHER INFORMATION

The drill site is located on an exposed ridge. The soil in the area consists of a silty loam. Vegetation is comprised of pinion pine, juniper, oak brush, sagebrush, herbs and native grasses and covers approximately 50% of the ground. Animals include deer, small mammals and birds. The affected land is federally owned and the primary surface uses are oil and gas production and ranching. There are no live streams in the immediate area. An ephemeral stream flows through Bitter Creek. An archeological report will be performed prior to

commencement of operations and will be filed at the Moab office of the BLM.

13. LESSEE'S OR OPERATOR'S REPRESENTATIVES

James G. Routson  
P. O. Box 3394  
Billings, MT 59103  
(406) 245-5077

Joel V. Dyk  
1360 HHay6 & 50  
LLama CO 81524  
(970) 858-7546


14. SELF CERTIFICATION STATEMENT

Be advised that Lone Mountain Production Company is considered to be the operator of the Valentine Federal No. 4, NW¼SE¼ Sec. 34, T16S-R25E, Lease No. U-38276, Grand County, Utah and is responsible under the terms and conditions of the lease for the operations conducted on the leased lands.

Bond coverage for this lease is provided by Statewide Bond No. UT0719 via surety consent as provided for in 43 CFR 3104.2.

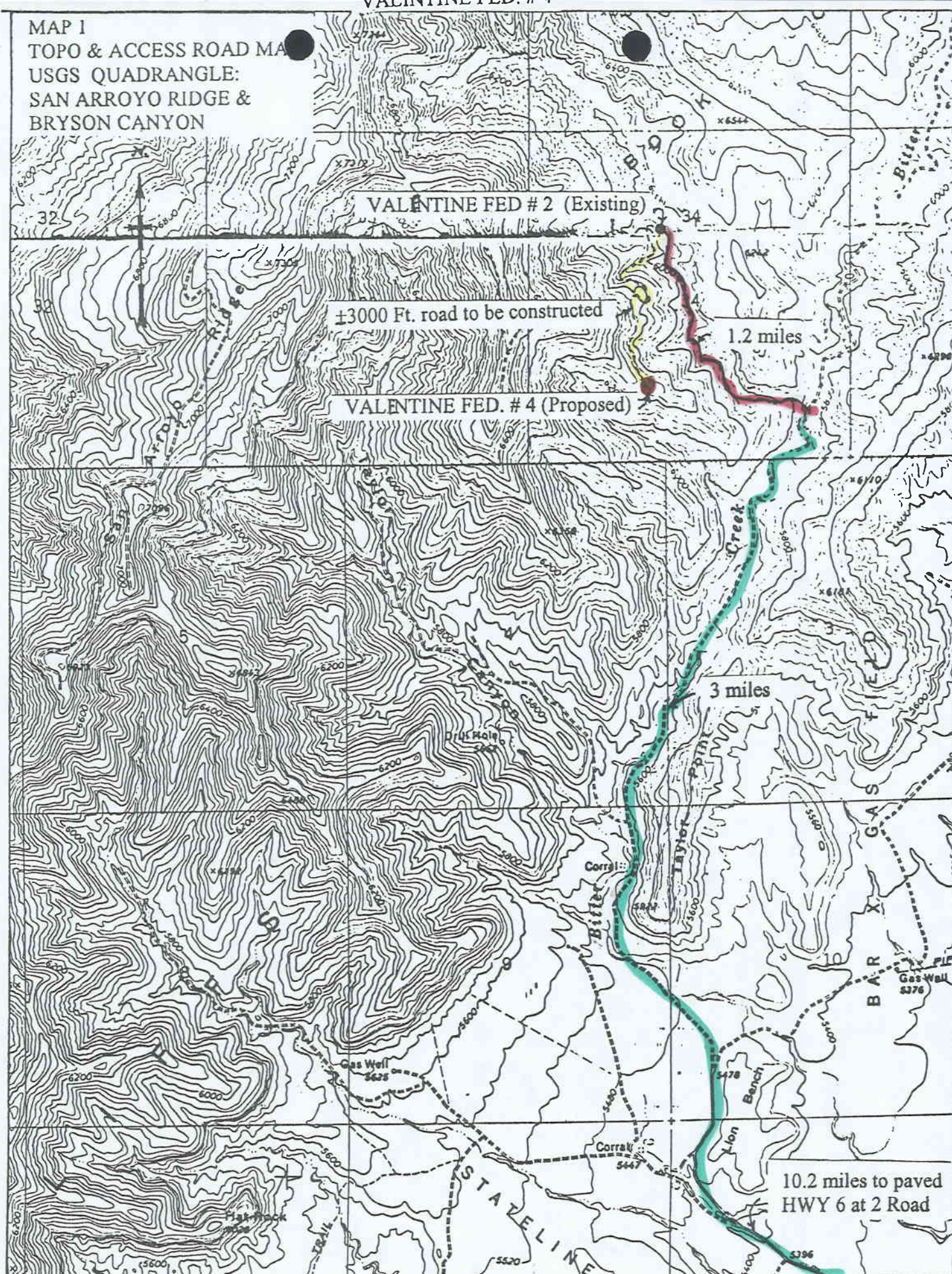
This office will hold the aforementioned operator and bond liable until the provision of 43 CFR 3106.7-2 continuing responsibility are met.

DATE: 2/14/97

  
\_\_\_\_\_  
Joel V. Dyk  
Petroleum Engineer

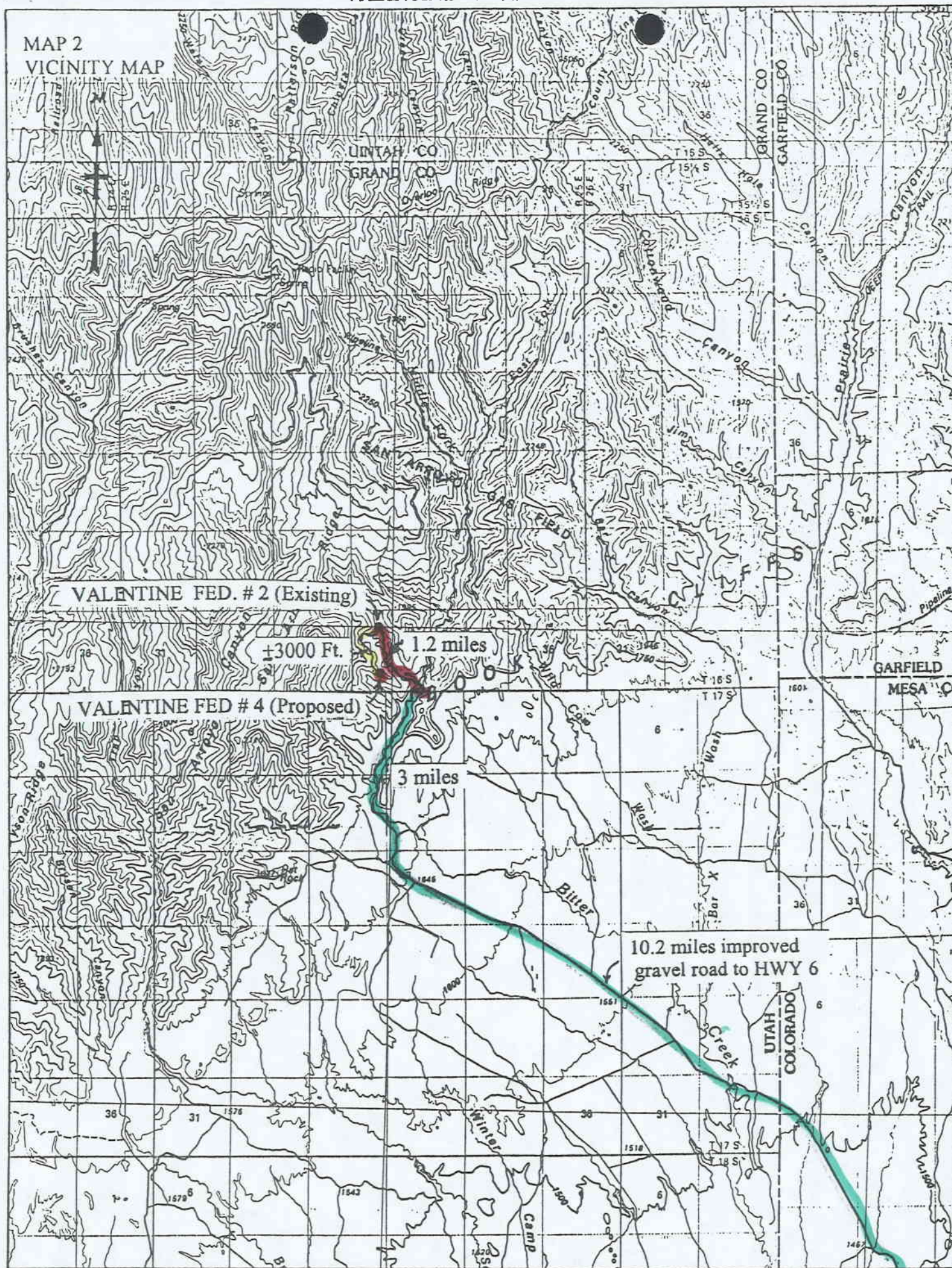


VALINTINE LEO. "



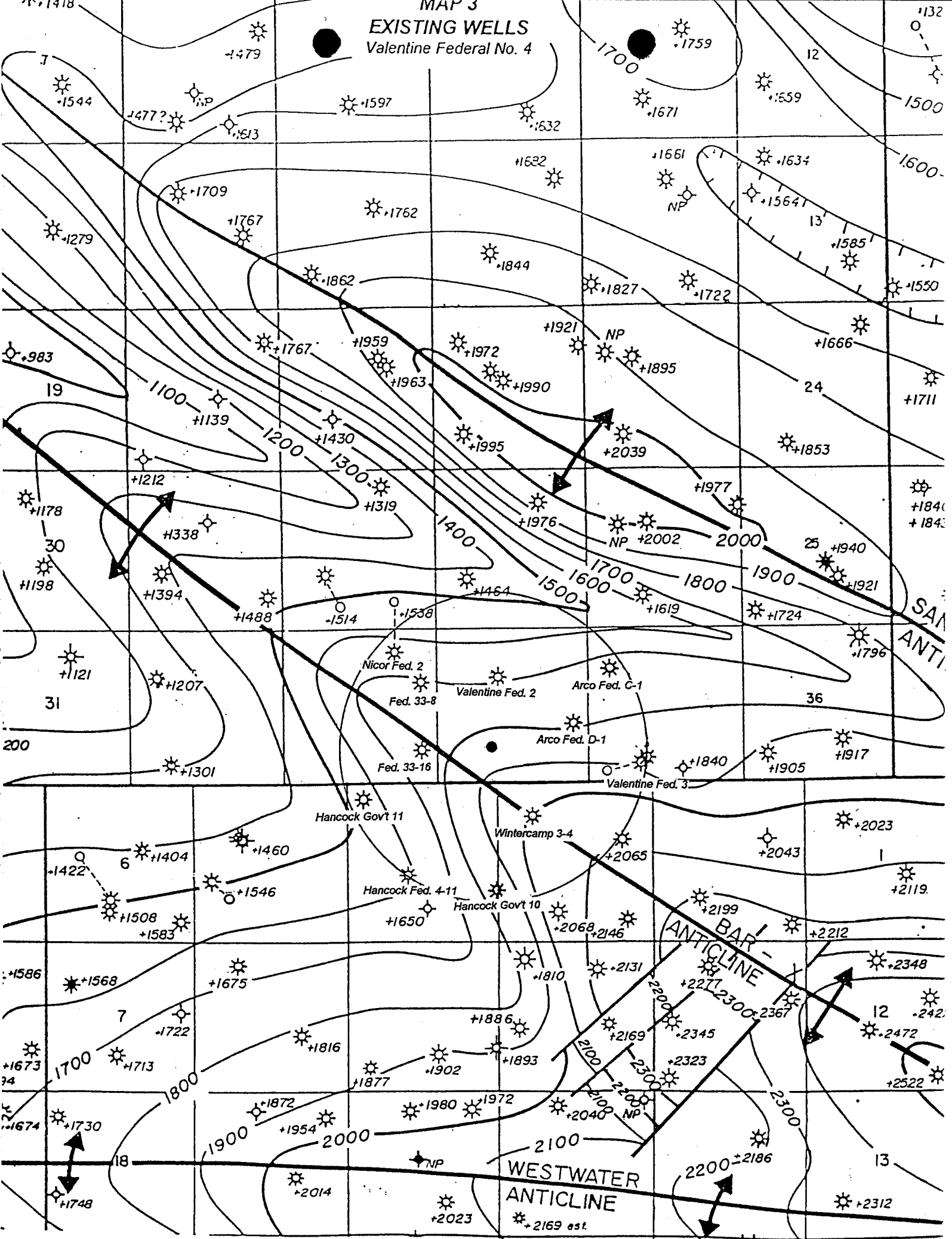


MAP 2  
VICINITY MAP





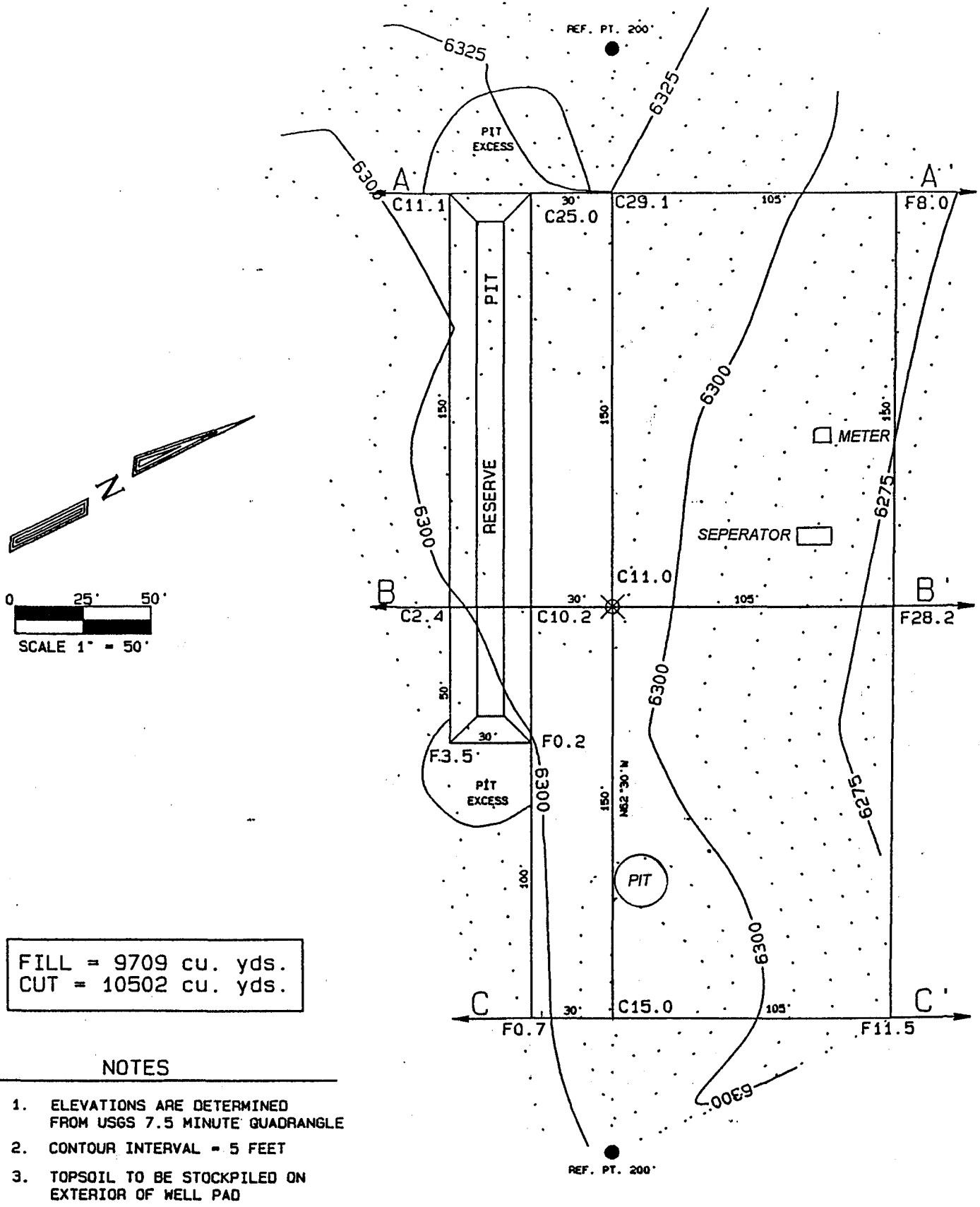
MAP 3  
EXISTING WELLS  
Valentine Federal No. 4



# PAD LAYOUT

EXHIBIT 2

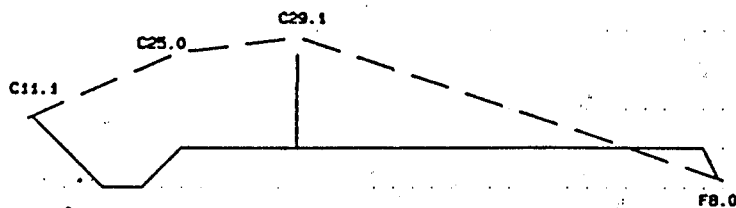
LONE MOUNTAIN PROD.  
VALENTINE FED. #4



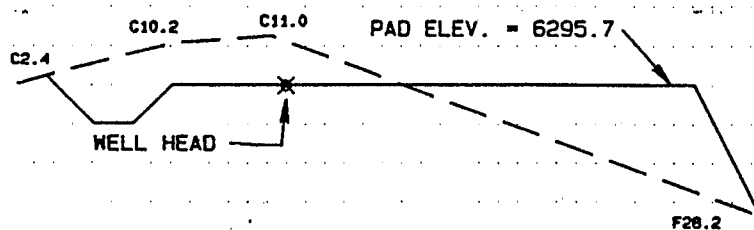
# CROSS SECTION

LONE MOUNTAIN PROD.  
VALENTINE FED. #4

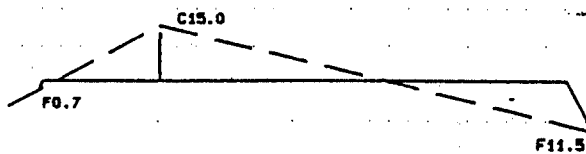
SECTION A - A'



SECTION B - B'



SECTION C - C'



HORIZ. SCALE 1" = 50'

VERT. SCALE 1" = 10'

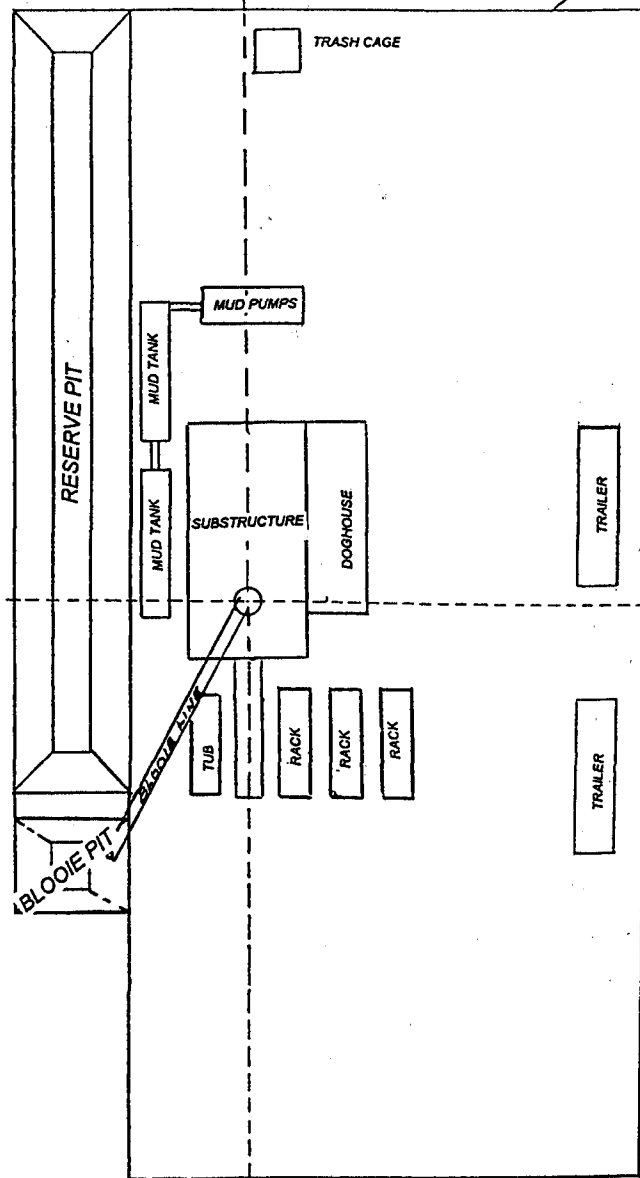
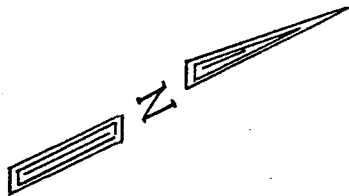
D H SURVEYS INC.

JOB NO. 223-94-01



# LONG MOUNTAIN PRODUCTION COMPANY

## VALENTINE FED. 4 RIG LAYOUT EXHIBIT 4



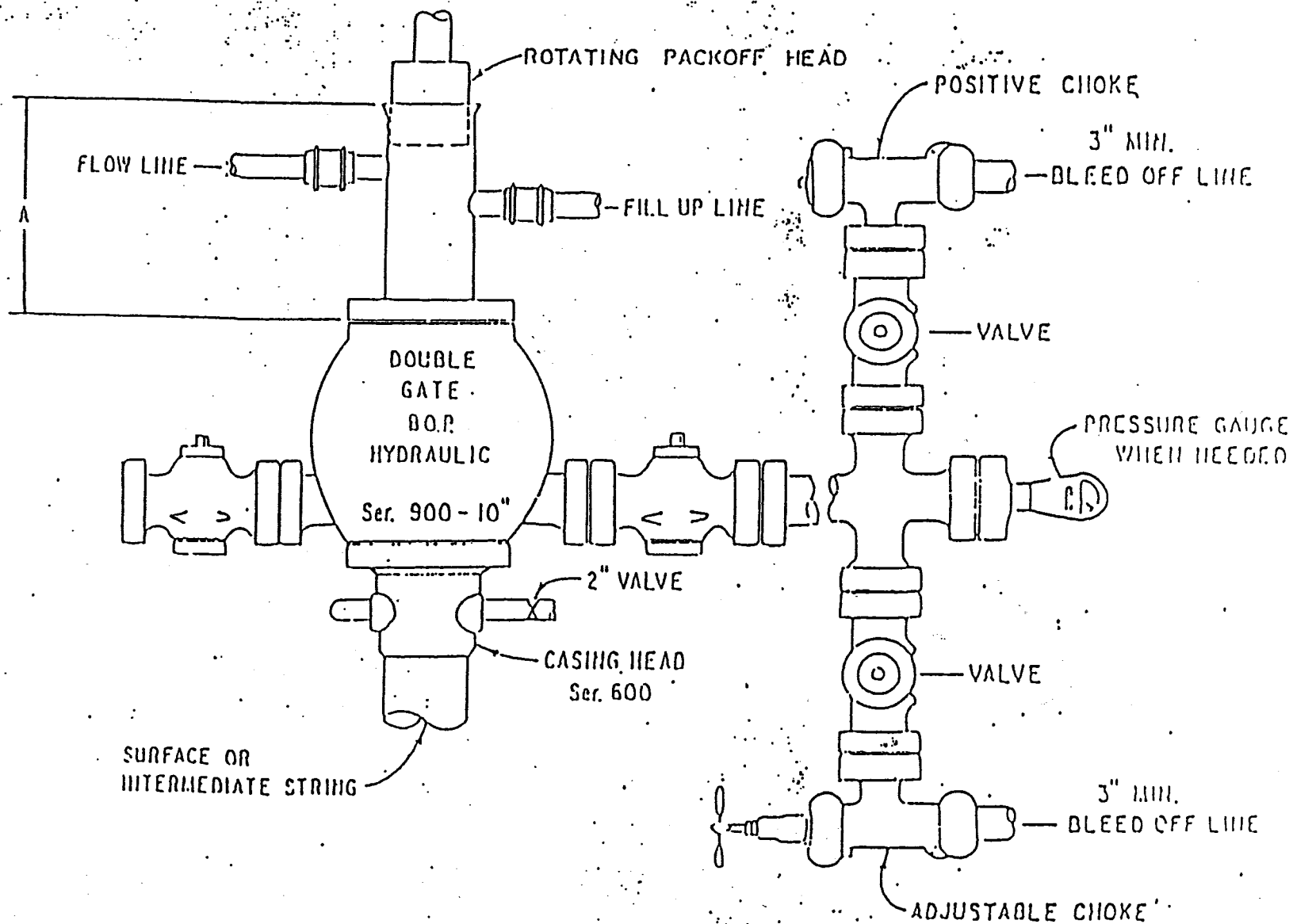


EXHIBIT I  
BLOWOUT PREVENTER DIAGRAM

WORKSHEET  
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 02/25/97

API NO. ASSIGNED: 43-019-31359

WELL NAME: VALENTINE FEDERAL #4  
OPERATOR: LONE MOUNTAIN PRODUCTIN (N7210)

PROPOSED LOCATION:

SESW 34 - T16S - R25E  
SURFACE: 1230-FSL-1896-FWL  
BOTTOM: 1230-FSL-1896-FWL  
GRAND COUNTY  
SAN ARROYO FIELD (250)

LEASE TYPE: FED  
LEASE NUMBER: U - 38276

PROPOSED PRODUCING FORMATION: DKTA

INSPECT LOCATION BY: / /

TECH REVIEW	Initials	Date
Engineering		
Geology		
Surface		

RECEIVED AND/OR REVIEWED:

☒ Plat  
☒ Bond: Federal ☒ State ☐ Fee ☐  
(Number 417 0719)  
☒ Potash (Y/N)  
☒ Oil shale (Y/N)  
☒ Water permit  
(Number COMMERCIAL SUPPLIER)  
☒ RDCC Review (Y/N)  
(Date: \_\_\_\_\_)

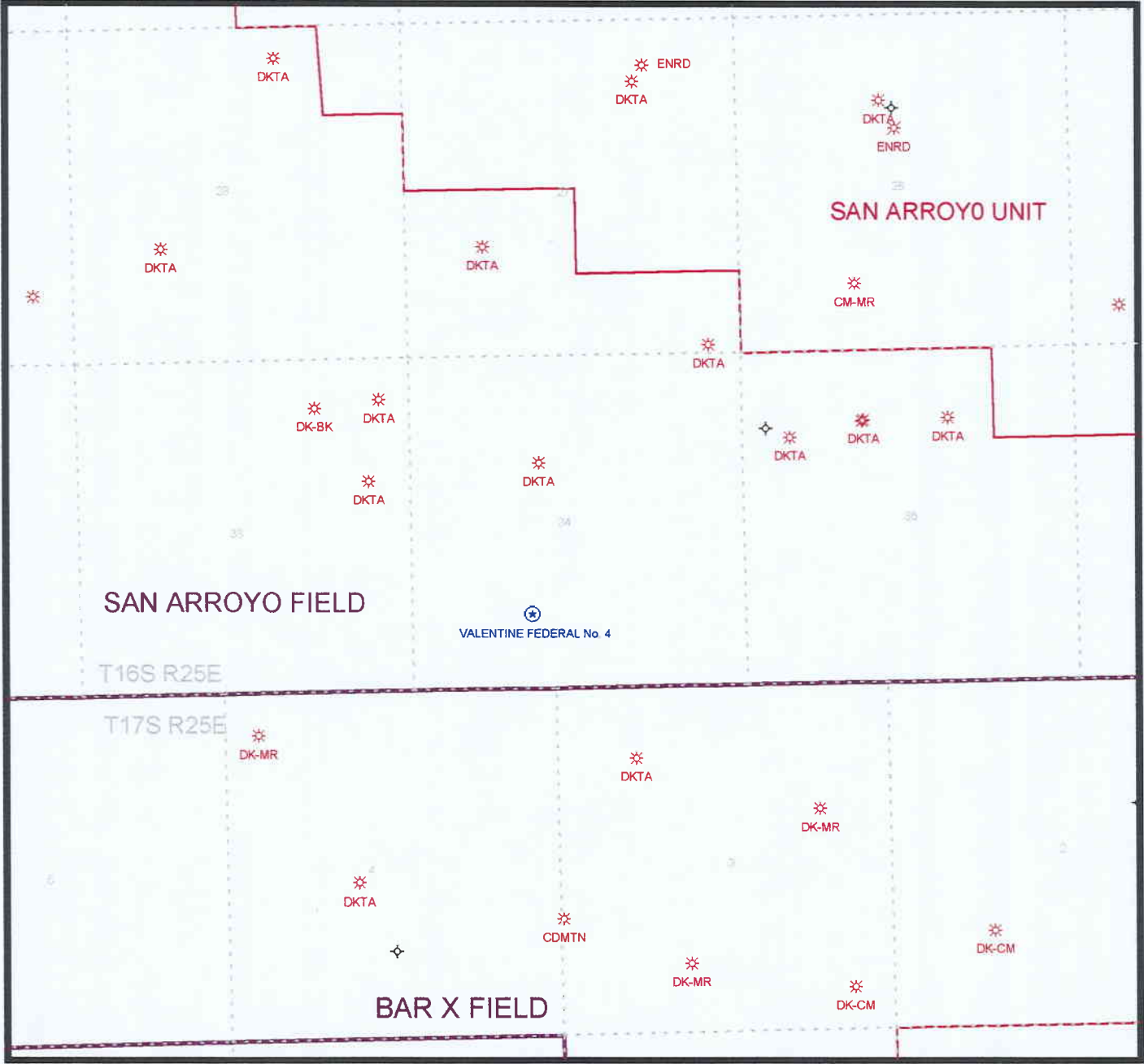
LOCATION AND SITING:

☐ R649-2-3. Unit: \_\_\_\_\_  
☐ R649-3-2. General.  
☐ R649-3-3. Exception.  
☒ Drilling Unit.  
Board Cause no: 13-6(1)  
Date: 8-28-86

COMMENTS:

STIPULATIONS:

OPERATOR: LONE MOUNTAIN (N7210)  
FIELD: SAN ARROYO (250)  
SEC, TWP, RNG: 34, 16S, 25E  
COUNTY: GRAND  
UAC: R649-2-3

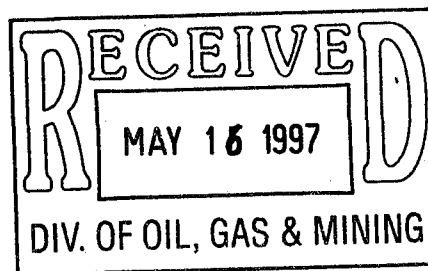


PREPARED:  
DATE: 26-FEB-97

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK  DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>			5. LEASE DESIGNATION AND SERIAL NO. U-38276	
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>			6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR Lone Mountain Production Company			7. UNIT AGREEMENT NAME CR-38	
3. ADDRESS OF OPERATOR 1360 Hwy 6 & 50, Loma Colorado 81524			8. FARM OR LEASE NAME Valentine Federal	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 1230' FSL, 1896' FWL At proposed prod. zone Same			9. WELL NO. No. 4	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 17 miles NW of Mack, Colorado			10. FIELD AND POOL, OR WILDCAT San Arroyo	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) lease: 583' dr unit: 576'		16. NO. OF ACRES IN LEASE 360	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 34, T16S-R25E	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 2416'		19. PROPOSED DEPTH 4993	12. COUNTY OR PARISH Grand	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6307' GR		17. NO. OF ACRES ASSIGNED TO THIS WELL 320		
		20. ROTARY OR CABLE TOOLS Rotary		
		22. APPROX. DATE WORK WILL START* June 20, 1997		



FLARING OR VENTING OF  
GAS IS SUBJECT TO NTL 4-A

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED [Signature] TITLE Petroleum Engineer DATE 2/14/97  
(This space for Federal or State office use)

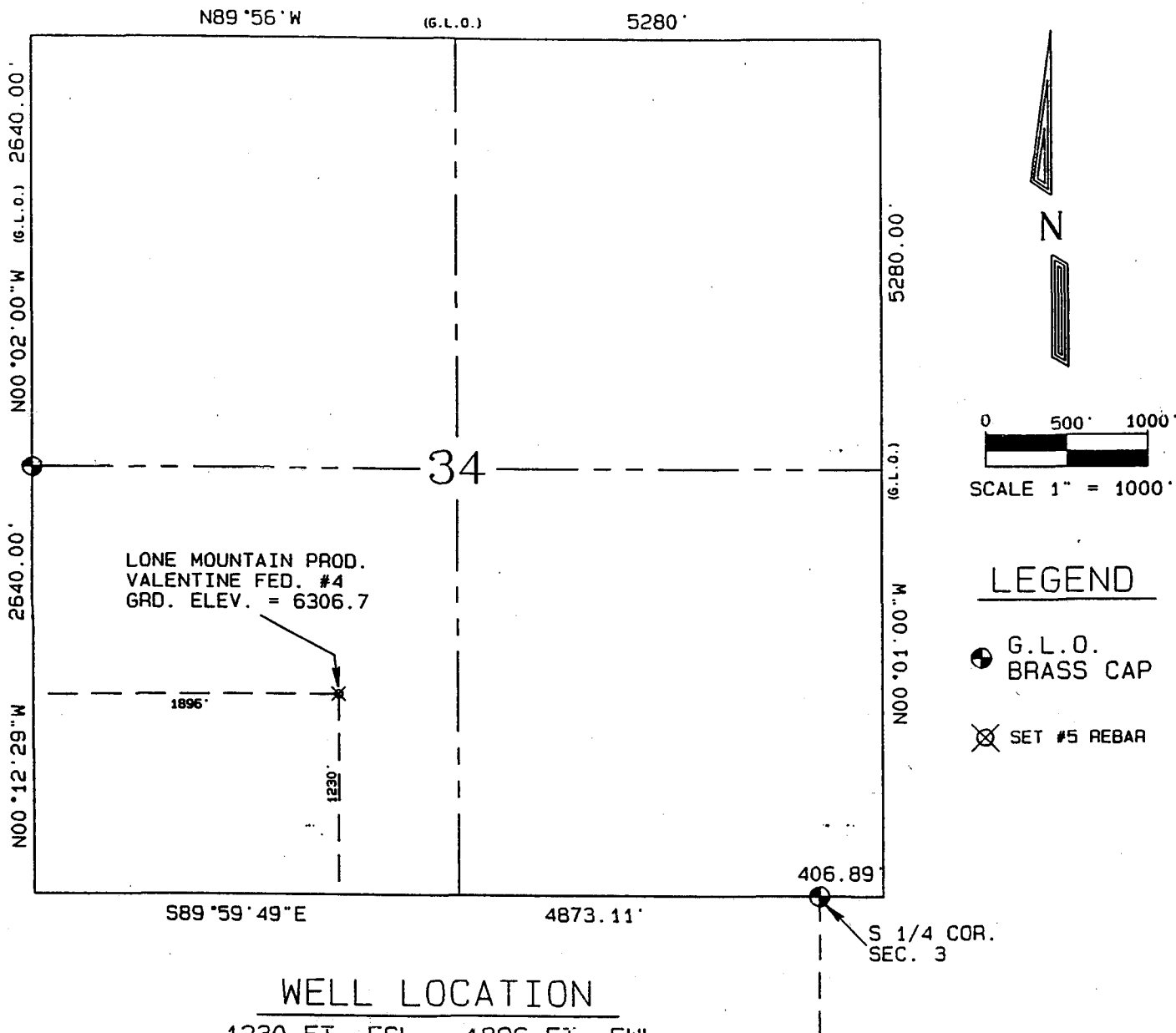
PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
/s/ Brad D. Palmer Assistant Field Manager, MAY 12 1997  
APPROVED BY \_\_\_\_\_ TITLE Resource Management DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

CONDITIONS OF APPROVAL ATTACHED

\*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

# EXHIBIT 1



## WELL LOCATION

1230 FT. FSL - 1896 FT. FWL  
SECTION 34, T16S, R25E, S.L.B. & M.  
GRAND COUNTY, UTAH

## SURVEYOR'S STATEMENT

I, MICHAEL W. DRISSEL, a registered Land Surveyor in the State of Utah, do hereby state that the well location shown hereon was staked on the ground based on existing monumentation and/or physical evidence found in the field and is correct to the best of my knowledge, and belief.

*Michael W. Drissel*  
REGISTERED LAND SURVEYOR  
No. 6934  
MICHAEL W. DRISSEL  
10-12-94

D H SURVEYS INC.

118 OURAY AVE.  
Grand Junction, CO. 81501-6572  
(303) 245-8749

Lone Mountain Production Company  
Valentine Federal No. 4  
Lease U-38276  
SESW Section 34, T16S, R25E  
Grand County, Utah

CONDITIONS OF APPROVAL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Be advised that Lone Mountain Production Company is considered to be the operator of the above well and is responsible under the terms and conditions of the lease for the operations conducted on the leased lands.

Bond coverage for this well is provided by UT 0719 (Principal - Lone Mountain Production Company) via surety consent as provided for in 43 CFR § 3104.2.

This office will hold the aforementioned operator and bond liable until the provisions of 43 CFR § 3106.7-2 continuing responsibility are met.

This permit will be valid for a period of one year from the date of approval. After permit termination, a new application must be filed for approval.

All lease operations will be conducted in full compliance with applicable regulations (43 CFR § 3100), Onshore Oil and Gas Orders, lease terms, notices to lessees, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions and the approved plan will be made available to field representatives to insure compliance.

A. DRILLING PROGRAM

1. The proposed 2M BOP system is adequate. The BOP system shall be maintained and tested in accordance with Onshore Oil and Gas Order No. 2.
2. A valve capable of isolating the pressure gauge from the choke manifold must be in place. This will facilitate changing the gauge if necessary.
3. When drilling with air, the blooie line must be equipped with a mist system for suppression of cuttings dust and an auto-ignitor. Other air drilling requirements can be found in Onshore Oil and Gas Order No. 2, part III, E "Special Drilling Operations."



B. SURFACE USE PLAN

1. In order to protect deer winter range, no drilling will be allowed from December 1 through April 15. The limitation does not apply to maintenance and operation of producing wells. Exceptions to this limitation may be specified in writing by the authorized officer.
2. Surface disturbance and vehicular travel will be limited to the approved location and access route. Any additional area needed will be approved in advance.
3. To minimize the amount of fugitive dust and spray escaping from the blooie pit, the blooie line will be directed into a sloped bank of soil material.
4. All wells, whether drilling, producing, suspended, or abandoned, will be identified in accordance with 43 CFR 3162.6. When the well is abandoned, the abandonment marker must be at least four feet above restored ground level and must be inscribed with the following: operator name, lease number, well name and surveyed description (township, range, section and either quarter-quarter or footages).
5. At the end of drilling operations and prior to reclamation of the reserve pit, the fourth side of the pit will be fenced and the top of the pit will be covered with netting of one inch or less to prevent access by birds.
6. The reserve pit and blooie pit will be dry prior to being covered and recontoured.
7. Pipeline installation involving cross-country traffic will be suspended during periods of wet weather to reduce soil rutting and soil compaction.
8. If a gas meter run is constructed, it will be located on lease within 500 feet of the wellhead. The gas flowline will be buried from the wellhead to the meter and will be buried downstream of the meter until it leaves the pad. Meter runs will be housed and/or fenced. The gas meter shall be calibrated prior to first sales and shall be calibrated quarterly thereafter. All gas production and measurement shall comply with the provisions of 43 CFR § 3162.7-3, Onshore Oil and Gas Order No. 5, and American Gas Association (AGA) Report No. 3.
9. In the event the well pad or road is graveled or surfaced, the material will be removed prior to recontouring the surface for rehabilitation.
10. The operator will be responsible for noxious weed control on the disturbed areas within the limits of the well site and new road construction. The operator is responsible for consultation with the authorized officer and/or local authorities for acceptable weed control methods.

### C. REQUIRED APPROVALS, REPORTS AND NOTIFICATIONS

Required verbal notifications are summarized in Table 1, attached.

Building Location- Contact the BLM Natural Resource Protection Specialist at least 48 hours prior to commencing construction of location.

Spud- The spud date will be reported to BLM 24 hours prior to spudding. Written notification in the form of a Sundry Notice (Form 3160-5) will be submitted to the Moab BLM Office within 24 hours after spudding, regardless of whether spud was made with a dry hole digger or big rig.

Daily Drilling Reports- Daily drilling reports shall detail the progress and status of the well and shall be submitted to the Moab BLM Office on a weekly basis.

Monthly Reports of Operations- In accordance with Onshore Oil and Gas Order No. 1, this well shall be reported on Minerals Management Service (MMS) Form 3160, "Monthly Report of Operations," starting the month in which operations commence and continuing each month until the well is physically plugged and abandoned. This report will be filed directly with MMS.

Sundry Notices- There will be no deviation from the proposed drilling and/or workover program without prior approval. "Sundry Notices and Reports on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR § 3162.3-2. Safe drilling and operating practices must be observed.

Drilling Suspensions- Operations authorized by this permit shall not be suspended for more than 30 days without prior approval of the Moab BLM Office. All conditions of this approval shall be applicable during any operations conducted with a replacement rig.

Undesirable Events- Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be immediately reported to BLM in accordance with requirements of NTL-3A.

Cultural Resources- If cultural resources are discovered during construction, work that might disturb the resources is to stop, and BLM is to be notified.

First Production- Should the well be successfully completed for production, the Moab BLM Office will be notified when the well is placed in producing status. Such notification may be made by phone, but must be followed by a sundry notice or letter not later than five (5) business days following the date on which the well is placed into production.

A first production conference will be scheduled as soon as the productivity of the well is apparent. This conference should be coordinated through the local BLM Office. The local BLM Office shall be notified prior to the first sale.

Well Completion Report- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted to the Moab BLM Office not later than thirty (30) days after completion of the well or after completion of operations being performed, in accordance with 43 CFR § 3162.4-1. Two copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. When requested, samples (cuttings and/or samples) will be submitted to the Moab BLM Office.

Venting/Flaring of Gas- Gas produced from this well may not be vented/flared beyond an initial, authorized test period of 30 days or 50 MMcf, whichever first occurs, without the prior, written approval from BLM. Should gas be vented or flared without approval beyond the authorized test period, the well may be ordered shut-in until the gas can be captured or approval to continue the venting/flaring as uneconomic is granted. In such case, compensation to the lessor shall be required for that portion of the gas that is vented/flared without approval and which is determined to have been avoidably lost.

Produced Water- Produced waste water may be confined to an unlined pit for a period not to exceed 90 days after initial production. During the 90 day period, an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted to the Moab BLM Office for approval pursuant to Onshore Oil and Gas Order No. 7.

Off-Lease Measurement, Storage, Commingling- Prior approval must be obtained from the Moab BLM Office for off-lease measurement, off-lease storage and/or commingling (either down-hole or at the surface).

Plugging and Abandonment- If the well is completed as a dry hole, plugging instructions must be obtained from the Moab BLM Office prior to initiating plugging operations.

A "Subsequent Report of Abandonment" (Form 3160-5) will be filed with the Moab BLM Office within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR § 3162.6. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the BLM, or the appropriate surface managing agency.

TABLE 1

NOTIFICATIONS

Notify Rich McClure (801-259-2127) or Jack Johnson (801-259-2129) of the Moab BLM Office for the following:

2 days prior to commencement of dirt work, construction and reclamation;

1 day prior to spudding;

3 hours prior to testing BOPE

If the above cannot be reached, contact the person listed below.

Well abandonment operations require 24 hour advance notice and prior approval. In the case of newly drilled dry holes, verbal approval can be obtained by calling the Moab BLM Office at (801) 259-6111. If approval is needed after work hours, you may contact the following:

Eric Jones, Petroleum Engineer	Office: (801) 259-2117 Home: (801) 259-2214
--------------------------------	--

Gary Torres, Petroleum Engineer	Office: (801) 587-2141 or (801) 259-2136 Home: (801) 587-2705
---------------------------------	---

BEFORE THE BOARD OF OIL, GAS AND MINING  
DEPARTMENT OF NATURAL RESOURCES  
IN AND FOR THE STATE OF UTAH

-----	-----
IN THE MATTER OF THE PETITION	*
OF LONE MOUNTAIN PRODUCTION	*
COMPANY, TXO PRODUCTION	*
CORPORATION, AND BURTON W.	*
HANCOCK FOR AN ORDER MODIFYING	*
PREVIOUS SPACING ORDERS TO	*
ALLOW INFILL DRILLING UPON	*
ESTABLISHED DRILLING UNITS	*
AND ESTABLISHING OTHER	*
DRILLING/SPACING UNITS FOR THE	*
DAKOTA AND MORRISON FORMATIONS	*
UNDERLYING CERTAIN ENUMERATED	*
LANDS IN GRAND COUNTY, UTAH	*
-----	-----

FINDINGS OF FACT,  
CONCLUSIONS OF  
LAW AND ORDER

Docket No. 86-009  
Cause No. 13-6

Pursuant to the Petition of Lone Mountain Production Corporation, TXO Production Corporation, and Burton W. Hancock, this cause initially was heard before the Board of Oil, Gas and Mining, Department of Natural Resources, State of Utah, on Friday, May 9, 1986, at 10:30 a.m. in the Board Room of the Division of Oil, Gas and Mining, 355 West North Temple, 3 Triad Center, Suite 301, Salt Lake City, Utah. The following Board members were present:

Gregory P. Williams, Chairman  
James W. Carter  
John M. Garr  
Charles R. Henderson  
Richard B. Larsen  
Judy F. Lever  
E. Steele McIntyre

The Board was represented by Mark C. Moench, Esq.,  
Assistant Attorney General for the State of Utah.

Appearances for the Division Of Oil, Gas & Mining were  
made by:

Dr. Dianne Nielson, Director  
Division of Oil, Gas & Mining

Ronald J. Firth, Associate  
Director, Oil & Gas

John R. Baza, Petroleum Engineer

The Division was represented by Barbara W. Roberts,  
Assistant Attorney General for the State of Utah.

The Petitioners were represented by John A. Harja of  
Hugh C. Garner & Associates, 310 South Main Street, Suite 1400,  
Salt Lake City, Utah 84101.

Testimony was given by:

A. John Davis, Attorney at Law, for Petitioners  
James G. Routson, Geologist, for Petitioners

Mr. Assad M. Raffoul, Petroleum Engineer with the Salt  
Lake City Office of the Bureau of Land Management was present and  
gave a presentation and statement for the record.

Statements were made for the record in this matter at  
the regularly scheduled Board hearings on May 22, June 26 and  
July 31, 1986. Petitioners filed an Amended Petition on August  
5, 1986, which requested relief essentially based upon the  
findings of the Board as stated at the July 31 meeting.

The Amended Petition was heard at the regularly  
scheduled Board meeting on August 28, 1986. All Board members

stated above were present and all appearances were identical except that the Bureau of Land Management was represented by Mr. Robert Hendricks of the Salt Lake City office.

NOW, THEREFORE, the Board having considered the testimony adduced and the exhibits reviewed in said hearing, and being fully advised in the premises, now makes and enters the following:

FINDINGS OF FACT

1. Due and regular notice of the time, place and purpose of the May 9 and August 28 hearings was given to all interested parties as required by law and the rules and regulations of the Board. The parties specifically served with notice are listed in Exhibit "1" attached to the Petition, which names represent all persons who own the right to explore for and produce hydrocarbons from the subject lands and all lands immediately adjacent to and cornering upon the subject lands.

2. The Board has jurisdiction over the subject matter of the Amended Petition and over all parties interested therein and has jurisdiction to make and promulgate the order hereinafter set forth.

3. The Amended Petition in this matter is a request to modify previously existing drilling/spacing units for the Dakota and Morrison formations in parts of Grand County, Utah to permit additional wells to be drilled, both by downspacing some of the existing units and by authorizing additional wells within the other of the existing units (increased well density or infill).

The Amended Petition requests that existing wells be designated the current initial production well for infill units, or be the current designated production well for the new smaller units, as appropriate. New wells would be drilled, at the operator's option, within the opposite government quarter section from the existing well, or in the new smaller units (whichever is appropriate), at a point not less than 500 feet from the unit boundaries and 2,000 feet from other wells producing from the same formation, with a 200 foot tolerance to each requirement to be administratively approved pursuant to Rule 302.1 of the General Oil and Gas Rules for Utah.

In addition, the Amended Petition requests that other lands in Grand County be spaced (primarily upon a 160 acre basis) for production from the Dakota and Morrison formations. One well would be authorized for each unit with existing wells designated as the current production well. New wells would be drilled at a point not less than 500 feet from the unit boundaries and not less than 2,000 feet from other wells producing from the same formations with a 200 foot tolerance to each requirement to be administratively approved pursuant to Rule 302.1 of the General Oil and Gas Rules for Utah.

In addition, the Amended Petition also requests various other small drilling spacing units be established or modified.

4. An Interim Order was entered in this matter, effective May 22, 1986, which allowed Petitioners to drill 3



wells upon the subject lands. The terms of the Interim Order are hereby incorporated into this final Order.

5. The Board has previously entered Orders in Cause Nos. 4-2, 13-3, 149-1, 149-2B, 149-3B, 149-5, 149-9, 165-2, 165-3, 165-4, 165-6, 165-7, and 165-10 establishing the following drilling/spacing units for the production of hydrocarbons from the Dakota and Morrison formations underlying Grand County, Utah (among other lands):

A. 320 acre units (more or less)

i) Township 16 South, Range 24 East, S.L.M.

Section 25: All  
Section 35: All  
Section 36: All

ii) Township 16 South, Range 25 East, S.L.M.

Section 19: All  
Section 21: S1/2  
Section 29: All  
Section 30: All  
Section 31: All  
Section 32: All  
Section 33: All  
Section 34: All  
Section 35: S1/2

iii) Township 16 South, Range 26 East, S.L.M.

Section 32: All  
Section 33: All

iv) Township 17 South, Range 24 East, S.L.M.

Section 1: All  
Section 2: All  
Section 3: All  
Section 11: All  
Section 12: All  
Section 14: All

v) Township 17 South, Range 25 East, S.L.M.

Section 5: All  
 Section 6: All

vi) Township 17 South, Range 26 East, S.L.M.

Sections 4 & 5: All  
 Sections 8 & 9: N1/2

B. 280 acre units (more or less)i) Township 16 South, Range 25 East, S.L.M.

Section 28: SE1/4, S1/2 NE1/4, NW1/4 NE1/4  
 Section 35: NW1/4, S1/2 NE1/4, NW1/4 NE1/4

C. 400 acre unit (more or less)i) Township 17 South, Range 25 East, S.L.M.

Section 13: SE1/4, SW1/4, S1/2 NW1/4

6. Geologic evidence indicates that the Dakota and Morrison formations also extend under the following unspaced lands, and, as such, constitute a common source of supply of (principally) natural gas:

i) Township 16 South, Range 24 East, S.L.M.

Section 26: All

ii) Township 17 South, Range 24 East, S.L.M.

Section 5: SE1/4  
 Section 8: NW1/4 NE1/4, NW1/4  
 Section 13: All

iii) Township 17 South, Range 25 East, S.L.M.

Section 2: W1/2 W1/2  
 Section 3: All  
 Section 4: All  
 Section 8: S1/2, E1/2 NE1/4  
 Section 9: All  
 Section 10: All  
 Section 14: All

Section 15: All  
Section 16: All  
Section 17: All  
Section 18: All

7. The San Arroyo, Winter Camp, Bar-X, Bar Creek, Bryson Canyon, Westwater and Horse Point "B" operational units exist upon lands contiguous with the above stated lands. The shape of these operational units prevents the establishment of uniform drilling units upon all of the above stated lands.

8. Currently available geologic evidence indicates that one well will not drain the natural gas reserves underlying a spaced area 280 acres in size or larger. The geologic evidence indicates that one well will drain approximately 160 acres, and that a 160 acre drainage area is not smaller than the maximum area that can be efficiently and economically drained by one well.

9. Due to the presence of existing communitization agreements and other factors, and in order to protect the correlative rights of the various interest owners, the geographic extent of several of the existing drilling/spacing units can not be altered. Increased well density authorization is appropriate for these units. Additional wells upon existing units are authorized to be drilled only at the option of the operator of each separate unit, such drilling decision to be based upon geologic and engineering data indicating that the well will recover additional hydrocarbons in an economically feasible manner. Economically feasible means that a prudent operator

would have a reasonable opportunity to recover the costs of drilling, completing, producing and operating the well, plus a reasonable profit.

10. It is not the intent of this Order to change, amend or otherwise alter any existing contractual rights or relationships, express or implied, between any parties who share in the production (or proceeds therefrom) from previously spaced drilling units or tracts pooled or unitized for purposes of developing and producing wells (upon the lands not spaced at the date of hearing on this matter). It is not the intent of this Order to alter any interests based on previously existing communitization or participation agreements.

11. The various types of relief ordered by the Board in this matter will prevent the drilling of unnecessary wells, prevent waste, and protect correlative rights.

#### CONCLUSIONS OF LAW

1. The Dakota and Morrison formations underlying the subject lands are a "common source of supply" as that term is defined in U.C.A. §40-6-2(a) (1953, as amended).

2. The Board has the authority, pursuant to U.C.A. §40-6-6(3), (1953, as amended) to modify previous spacing orders to include additional areas which are underlaid by a common source of supply.

3. The Board has the authority, pursuant to U.C.A. §40-6-6(4), (1953, as amended) to modify existing drilling/

spacing units to decrease the size of the unit or permit additional wells to be drilled within established units.

4. The various types of relief ordered by the Board in this matter will prevent the drilling of unnecessary wells, prevent waste, and protect correlative rights.

Sufficient evidence now being available upon which to reach a decision, the Board issues the following:

✓  
ORDER

IT IS HEREBY ORDERED THAT:

A. INTERIM ORDER

The terms of the Interim Order entered effective May 22, 1986 in this matter are incorporated into this final Order.

B. INFILL AUTHORIZATION

1) Two production wells are authorized for production from the Dakota and Morrison formations within the following established drilling/spacing units:

i) Township 16 South, Range 24 East, S.L.M.

Section 25: S1/2  
Section 35: E1/2  
Section 36: All

ii) Township 16 South, Range 25 East, S.L.M.

Section 28: SE1/4, S1/2 NE1/4, NW1/4 NE1/4 (280 acre unit)  
Section 29: All  
Section 30: All  
Section 31: All  
Section 32: All  
Section 33: S1/2  
Section 34: All  
Section 35: NW1/4, S1/2 NE1/4, NW1/4 NE1/4 (280 acre unit)  
Section 35: S1/2

iii) Township 16 South, Range 26 East, S.L.M.

Section 32: All

✓ N/2 Sec 32 addl. well  
included in  
#13-6 Interim  
orderiv) Township 17 South, Range 24 East, S.L.M.

Section 2: All

Section 11: N1/2

Section 12: S1/2 ✓

Section 14: S1/2 ✓

v) Township 17 South, Range 25 East, S.L.M.

Section 5: N1/2

Section 13: SE1/4, SW1/4, S1/2 NW1/4 (400 acre unit)

vi) Township 17 South, Range 26 East, S.L.M.

Sections 4 &amp; 5: N1/2

2) Existing wells capable of production from the Dakota/Morrison formations in the units stated in paragraph "B(1)" above are the authorized current initial well per unit. Additional wells shall be located no less than 500 feet from the unit boundaries and no less than 2,000 feet from other wells producing from the same formations (with a 200 foot tolerance for each distance requirement to be administratively granted pursuant to Rule 302.1 for geological, topographical, cultural or other reasons) so long as only one well is located within each of the governmental quarter sections (or lots or approximate acreage corresponding thereto) which comprise each unit.

3) Said additional wells shall be permitted to be drilled only at the option of the operator of each separate

drilling unit. Said drilling decision shall be based upon the criteria stated in Finding of Fact No. 9 above.

4) It is not the intent of this Order that existing contractual rights or relationships, express or implied, between all parties who share in the production, or proceeds therefrom, from any of the established drilling units stated in paragraph "B(1)" above be altered by virtue of this order.

C. DOWNSPACED UNITS

1) The existing 320 acre units within the following lands are downspaced to two 160 acre (more or less) drilling and spacing units, with any existing wells to be the authorized current production well within the new unit boundaries:

- i) Township 16 South, Range 24 East, S.L.M.  
Section 35: W1/2
- ii) Township 16 South, Range 25 East, S.L.M.  
Section 19: All  
Section 33: N1/2
- iii) Township 16 South, Range 26 East, S.L.M.  
Section 33: All
- iv) Township 17 South, Range 24 East, S.L.M.  
Section 1: All  
Section 3: All  
Section 11: S1/2  
Section 12: N1/2  
Section 14: N1/2 - Included in 136 Interim order
- v) Township 17 South, Range 25 East, S.L.M.  
Section 6: All

S/r 6 included in Interim order.

vi) Township 17 South, Range 26 East, S.L.M.

Sections 4 and 5: S1/2

Sections 8 and 9: N1/2

2) Each drilling unit shall be composed of and equivalent to a regularly surveyed quarter section or lots corresponding thereto.

3) Well locations within the new units that do not currently contain a well are authorized as follows:

i) not less than 500 feet from the established unit boundaries, with a 200 foot tolerance to be administratively granted pursuant to Rule 302.1 for geological, topographical, cultural or other reasons; and

ii) not less than 2,000 feet from other wells producing from the same formations, with a 200 foot tolerance to be administratively approved pursuant to Rule 302.1 for geological, topographical, cultural or other reasons.

D. NEW DRILLING/SPACING UNITS

1) The following drilling/spacing units are hereby established for production from the Dakota and Morrison formations:

i) 160 acre units

Township 16 South, Range 24 East, S.L.M.

Section 26: All



Township 17 South, Range 24 East, S.L.M.

Section 13: All

Township 17 South, Range 25 East, S.L.M.

Section 4: W1/2 *modified by Order of Board 3/26/87*  
 Section 8: SW1/4  
 Section 9: E1/2 *modified by order of Board 3/26/87* ✓  
 Section 14: All  
 Section 15: All ✓  
 Section 16: All  
 Section 17: All  
 Section 18: All

ii) Other units (acreage approximate)Township 17 South, Range 24 East, S.L.M.

Section 5: SE1/4 (160 acres)

Section 8: NW1/4, NW1/4 NE1/4 (200 acres)

2) Each such 160 acre unit shall be composed of and equivalent to a regularly surveyed quarter section or lots corresponding thereto.

3) One well is authorized upon each of the units so established (with existing wells to be the authorized current production well), said well to be located anywhere within the unit that is not less than 500 feet from the unit boundaries (with a 200 foot tolerance to be administratively granted pursuant to Rule 302.1 for geologic, topographic, cultural or other reasons) and not less than 2,000 feet from other wells producing from the same formations (with a 200 foot tolerance to be administratively approved pursuant to Rule 302.1 for geologic, topographic, cultural or other reasons).

E. Cause No. 149-1 is amended to alter the drilling/spacing unit composed of the S1/2 of Section 21, Township 16 South, Range 25 East, S.L.M. (320 acres) to the S1/2 SW1/4, NW1/4

SW1/4 of Section 21 (120 acres). One production well is authorized for this unit, to be located no less than 500 feet from the unit boundaries, and no less than 2,000 feet from other Dakota/Morrison wells, with a 200 foot tolerance to the distance requirements to be administratively approved pursuant to Rule 302.1 for geologic, topographic, cultural or other reasons.

F. The SE1/4 of Section 8 and SW1/4 of Section 9, both in Township 17 South, Range 25 East, S.L.M., are hereby established as 160 acre drilling/spacing units for production from the Dakota and Morrison formations, provided that the Communitization Agreement presently in effect covering the W1/2 of Section 9 and E1/2 E1/2 of Section 8, Township 17 South, Range 25 East, S.L.M. shall be terminated prior to production of any well drilled in the SE1/4 of Section 8. Termination of the Agreement shall require the written assent of all parties to the Agreement. The well presently producing in the SW1/4 of Section 9 shall be the authorized well for that new unit. The authorized well location for the SE1/4 of Section 8 shall be as stated in paragraph "D(3)" above. *Hancock Fed 8-10 NW1/4 SE 1900' PSL x 1637' PBL*

G. A hearing on the Amended Petition, insofar as it covers the W1/2 W1/2 of Section 2, Section 3, E1/2 Section 4, NW1/4 Section 9, E1/2 NE1/4 Section 8, and Section 10, all in Township 17 South, Range 25 East, S.L.M. is continued without date.

H. It is not the intent of this Order to change, amend or otherwise alter any existing contractual rights or relationships, express or implied, between any parties who share in the production (or proceeds therefrom) from previously spaced

drilling units or tracts pooled or unitized for purposes of developing and producing wells (upon the lands not spaced at the date of hearing on this matter). It is not the intent of this Order to alter any interests based on previously existing communitization or participation agreements.

I. This Order is effective as of August 28, 1986 ✓

J. The Board retains exclusive and continuing jurisdiction over all matters covered by this Order and over all parties affected thereby and particularly reserves exclusive and continuing jurisdiction to make further orders as appropriate and as authorized by statute and regulation.

DATED this 26<sup>th</sup> day of September, 1986 ✓

STATE OF UTAH  
BOARD OF OIL, GAS & MINING

  
Gregory P. Williams, Chairman

Approved as to form:

  
Mark C. Moench  
Assistant Attorney General



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt  
Governor

Ted Stewart  
Executive Director

James W. Carter  
Division Director

1594 West North Temple, Suite 1210  
Box 145801  
Salt Lake City, Utah 84114-5801  
801-538-5340  
801-359-3940 (Fax)  
801-538-7223 (TDD)

May 19, 1997

Lone Mountain Production Company  
1360 Hwy. 6 & 50  
Loma, Colorado 81524

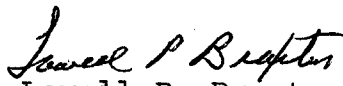
Re: Valentine Federal No. 4 Well, 1230' FSL, 1896' FWL, SE SW,  
Sec. 34, T. 16 S., R. 25 E., Grand County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-019-31359.

Sincerely,

  
Lowell P. Braxton  
Deputy Director

lwp

Enclosures

cc: Grand County Assessor

Bureau of Land Management, Moab District Office

Operator: Lone Mountain Production Company  
Well Name & Number: Valentine Federal No. 4  
API Number: 43-019-31359  
Lease: U-38276  
Location: SE SW Sec. 34 T. 16 S. R. 25 E.

### Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill.

2. Notification Requirements

Notify the Division within 24 hours following spudding the well or commencing drilling operations. Contact Jimmie Thompson at (801)538-5336.

Notify the Division prior to commencing operations to plug and abandon the well. Contact John R. Baza (801)538-5334 or Mike Hebertson at (801) 538-5333.

3. Reporting Requirements

All required reports, forms and submittals shall be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN  
TRIPLICATE\*  
(Other Instructions on  
reverse side)

Form Approved  
Budget Bureau No. 1004-0135  
Expires : March 31, 1993

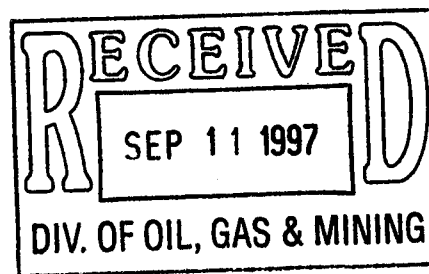
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT--" for such proposals <b>SUBMIT IN TRIPLICATE</b>		5. LEASE DESIGNATION AND SERIAL NO. <b>U-38276</b>
		6. IF INDIAN, ALLOTEE OR TRIBE NAME
		7. IF UNIT OR CA, AGREEMENT DESIGNATION <b>CR-38</b>
b. TYPE OF WELL OIL <input type="checkbox"/> GAS <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/> WELL <input type="checkbox"/> WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> ZONE <input type="checkbox"/> ZONE <input type="checkbox"/>		8. WELL NAME and No. <b>Valentine Federal No. 4</b>
2. NAME OF OPERATOR <b>Lone Mountain Production Company</b>		9. API WELL NO. <b>43-019-31359</b>
3. ADDRESS OF OPERATOR <b>P. O. Box 3394, Billings, Montana 59103 (406) 245-5077</b>		10. Field and Pool, or Exploratory Area <b>San Arroyo</b>
4. LOCATION OF WELL (Footage, Sec. T., R., M., or Survey Description) <b>1230' FSL, 1896' FWL Section 34-T16S-R25E (SESW)</b>		11. County or Parish, State <b>Grand County, Utah</b>

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> +Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other <u>Notice of Spud</u>	<input type="checkbox"/> Dispose of Water
(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log Form)		

13. Describe the Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If a well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

The Valentine Federal No. 4 well was spud at 2:00 p.m., September 2, 1997.

Drilled 12 1/4" surface hole to 350'. Set 9 5/8", 36#, K-55 STC casing at 337' GL. Cemented casing down with 205 sks. Class "G", 2% CaCl<sub>2</sub>. Cemented annulus with 300 sks. in three different jobs. Topped off with one yard Redi-Mix. Cementing witnessed by Jack Johnson, BLM, Moab.



14. I hereby certify that the foregoing is true and correct.

Signed: John S. Roston

Title: **Petroleum Engineer**

Date: **September 9, 1997**

(This space for Federal or State office use)

APPROVED BY : \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_  
CONDITIONS OF APPROVAL IF ANY

Title 18 U.S.C. Section 1001, make it a crime for any person knowingly and willfully to make any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

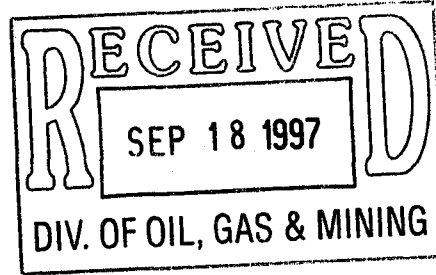
\*See Instructions of Reverse Side

**LONE MOUNTAIN PRODUCTION COMPANY**

Mailing Address:  
P.O. Box 3394  
Billings, MT 59103-3394

(406) 245-5077  
FAX 248-6321

Shipping Address:  
100 North 27th Street  
Suite 650  
Billings, MT 59101



September 16, 1997

State of Utah  
Division of Oil, Gas & Mining  
1594 W. Temple, Suite 1210  
P. O. Box 145801  
Salt Lake City, Utah 84114-5801

RE: ENTITY ACTION FORM - FORM 6  
BAR-X UNIT NO. 23 WELL  
VALENTINE FEDERAL NO. 4 WELL  
GRAND COUNTY, UTAH


Gentlemen:

Enclosed are two entity action forms, each in duplicate, for two new wells recently drilled by Lone Mountain Production Company.

Should you have any questions or need further information you may contact me at (406) 245-5077 or Joe Dyk in our Loma office at (970) 858-7546.

Sincerely,

LONE MOUNTAIN PRODUCTION COMPANY

  
James G. Routson  
President

Enclosure

cc: Joe Dyk



OPERATOR Lone Mountain Production Company

OPERATOR ACCT. NO. 11 7216

ADDRESS P. O. Box 3394

Billings, MT 59103-3394

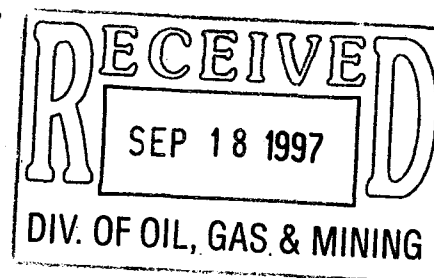
ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
A	99999	12222	43-019-31359	Valentine Federal No. 4	SESW	34	16S	25E	Grand	9/2/97	
WELL 1 COMMENTS: <i>Entity added 9-18-97. Lec</i>											
WELL 2 COMMENTS:											
WELL 3 COMMENTS:											
WELL 4 COMMENTS:											
WELL 5 COMMENTS:											

ACTION CODES (See instructions on back of form)

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (explain in comments section)

NOTE: Use COMMENT section to explain why each Action Code was selected.

(3/89)



*Jan D. Rantson*  
Signature  
President  
Title  
Date 9/16/97  
Phone No. (406) 245-5077

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE\*  
Form Approved  
Budget Bureau No. 1404-0135  
Expires March 31, 1993  
Other Instructions on reverse side  
**RECEIVED**  
OCT 06 1997  
5. LEASE DESIGNATION AND SERIAL NO.  
U-88276  
6. IF INDIAN, ALIOTEE OR TRIBE NAME  
DIV OF OIL, GAS & MINING  
7. IF UNIT OR CO. AGREEMENT DESIGNATION  
CR-38

**SUNDRY NOTICES AND REPORTS ON WELLS**  
Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT-" for such proposals

**SUBMIT IN TRIPLICATE**

b. TYPE OF WELL

OIL WELL ☐ GAS WELL ☒ OTHER ☐ SINGLE ZONE ☐ MULTIPLE ZONE ☐

2. NAME OF OPERATOR

Lone Mountain Production Company

3. ADDRESS OF OPERATOR

P. O. Box 3394, Billings, Montana 59103 (406) 245-5077

4. LOCATION OF WELL (Footage, Sec. T., R., M., or Survey Description)

1230' FSL, 1896' FWL Section 34-T16S-R25E (SESW)

8. WELL NAME and No.

Valentine Federal No. 4

9. API WELL NO.

43-019-31359

10. Field and Pool, or Exploratory Area

San Arroyo

11. County or Parish, State

Grand County, Utah

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☐ Notice of Intent  
☒ Subsequent Report  
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment  
☐ +Recompletion  
☐ Plugging Back  
☐ Casing Repair  
☐ Altering Casing  
☒ Other Run casing

- ☐ Change of Plans  
☐ New Construction  
☐ Non-Routine Fracturing  
☐ Water Shut-Off  
☐ Conversion to Injection  
☐ Dispose of Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log Form)

13. Describe the Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If a well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Drilled 8-3/4" wellbore to 1258' - no water encountered in Mesaverde or Castlegate. Reduced hole size to 7-7/8", drilled wellbore to 4595'. Ran E-logs. Log tops: Castlegate 988' (+5330); Mancos 1116' (+5202); Dakota Silt 4466' (+1852); Dakota Sand 4563' (+1755'); Morrison 4750' (+1568').

Ran 4-1/2" casing to 4978' KB and cemented with 225 sacks of 10-0 thixotropic.

Rig released @ 4:00 p.m., 10/2/97.

14. I hereby certify that the foregoing is true and correct.

Signed: James P. Banta

Title: **President**

Date: **October 2, 1997**

(This space for Federal or State office use)

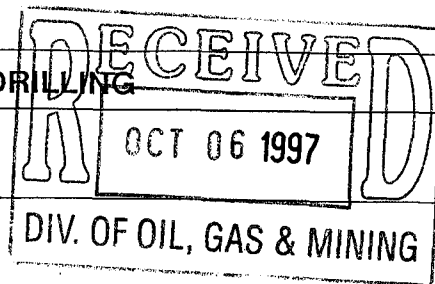
APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_  
CONDITIONS OF APPROVAL IF ANY

Title 18 U.S.C. Section 1001, make it a crime for any person knowingly and willfully to make any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*See Instructions of Reverse Side

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

## REPORT OF WATER ENCOUNTERED DURING DRILLING

1. Well name and number: Valentine Federal No. 4API number: 43-019-313592. Well Location: QQ SESW Section 34 Township 16S Range 25E County Grand3. Well operator: Lone Mountain Production CompanyAddress: P. O. Box 3394Billings, MT 59103-3394Phone: (406) 245-50774. Drilling contractor: CAZA Drilling Inc.Address: P. O. Box 17805Denver, CO 80217Phone: (970) 242-6912

5. Water encountered (attach additional pages as needed):

DEPTH		VOLUME (FLOW RATE OR HEAD)	QUALITY (FRESH OR SALTY)
FROM	TO		
No water encountered			

6. Formation tops:

Castlegate988'(+5330')Mancos1116'(+5202')Dakota Silt4466'(+1852')Dakota Sand4563'(+1755')Morrison4750'(+1568')TD4995'

If an analysis has been made of the water encountered, please attach a copy of the report to this form.

I hereby certify that this report is true and complete to the best of my knowledge.

Date: 10/2/97Name & Signature: James G. RoutsonTitle: President

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN  
TRIPLICATE\*  
(Other Instructions on  
reverse side)

Form Approved.  
Budget Bureau No. 1004-0135  
Expires : March 31, 1993

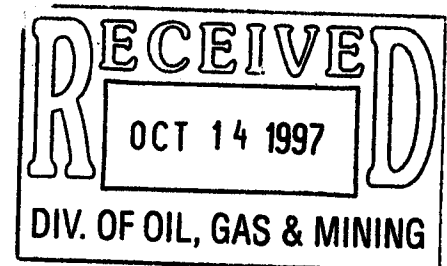
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT--" for such proposals <b>SUBMIT IN TRIPLICATE</b>		5. LEASE DESIGNATION AND SERIAL NO. <b>U-38276</b>
		6. IF INDIAN, ALLOTEE OR TRIBE NAME
		7. IF UNIT OR CA, AGREEMENT DESIGNATION <b>CR-38</b>
b. TYPE OF WELL OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/> WELL <input type="checkbox"/> WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> ZONE <input type="checkbox"/> ZONE <input type="checkbox"/>		8. WELL NAME and No. <b>Valentine Federal No. 4</b>
2. NAME OF OPERATOR <b>Lone Mountain Production Company</b>		9. API WELL NO. <b>43-019-31359</b>
3. ADDRESS OF OPERATOR <b>P. O. Box 3394, Billings, Montana 59103 (406) 245-5077</b>		10. Field and Pool, or Exploratory Area <b>San Arroyo</b>
4. LOCATION OF WELL (Footage, Sec. T., R., M., or Survey Description) <b>1230' FSL, 1896' FWL Section 34-T16S-R25E (SESW)</b>		11. County or Parish, State <b>Grand County, Utah</b>

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other <u>Completion</u>	<input type="checkbox"/> Dispose of Water
(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log Form)		

13. Describe the Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If a well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work)\*

Lone Mountain Production Company intends to complete the Valentine Federal No. 4 well per attached completion procedure..

We will commence operations as soon as a rig is available, probably within three weeks.



14. I hereby certify that the foregoing is true and correct.

Signed : James S. Rantson

Title: **President**

Date: **October 8, 1997**

(This space for Federal or State office use)

APPROVED BY : \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_  
CONDITIONS OF APPROVAL IF ANY

Title 18 U.S.C. Section 1001, make it a crime for any person knowingly and willfully to make any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*See Instructions of Reverse Side

**LONE MOUNTAIN PRODUCTION COMPANY**

**Valentine No. 4**

**SESW Sec. 34: T16S-R25E**

**Grand County, Utah**

**GL: 6307' KB: 6318'**

**4½" J-55 Casing @4978', PBTD 4931'.**

**Cemented with 225 sx.**

**COMPLETION PROCEDURE**

1. Run correlation and bond logs off mast truck.
2. MIRU workover rig. Nipple up tree, BOP's, frac spool.
3. Pick up 3⅞" bit, SN, 4½" csg scraper, 2⅜" tubing. TIH to PBTD, circulate well clean. Pressure test casing and BOP's to 4000 psi. drop standing valve, pressure test tbg to 6000 psi. Swab well dry, TOH w/ tbg, bit, scraper.
4. Rig up wireline truck. Perforate Dakota with one .35" diameter hole at each of the following depths: 4574', 4592', 4600', 4615', 4621', 4648', 4653', 4661', 4664', 4674', 4686', 11 holes total. Rig down wireline truck.
5. TIH w/ 4½" tension packer on 2⅜" tubing, set @ ± 4550'. Acidize all perforations with 600 Gallons 7½% MSR and 33 ball sealers.
6. Run packer past perforations to knock balls off. Swab well to clean up & test. COH & lay down packer.
7. Frac well with 100,000# 20-40 sand in cross linked borate base fluid. Maximum treating pressure 4000 psi. Frac @ 33-36 BPM
8. TIH w/ 2⅜" tubing, tag sand fill. Land with tbg tail @ ± 4785'. Swab and flow back well to clean up. Run production test.
9. Reverse sand fill with well gas if necessary.
10. Rig up wireline truck. Perforate Morrison through tubing 4814-4820, 4 spf, 24 shots total. Rig down wireline truck.
11. Flange well up, RDMO service rig.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE

(See other In-  
struction  
page)Budget Bureau No. 1004-0137  
Expires August 31, 1985

LEASE DESIGNATION AND SERIAL NO.

U-38276

BY INDIAN ALLOTTEE OR TRIBE NAME

UNIT AGREEMENT NAME

CR-38

FARM OR LEASE NAME

Valentine Federal

WELL NO.

No. 4

FIELD AND POOL, OR WILDCAT

San Arroyo

SEC., T., R., M., OR BLOCK AND SURVEY  
OR AREA

Sec. 34: T16S-R25E

(SE 1/4 SW 1/4)

COUNTY OR  
PARISH

Grand

STATE

Utah

1. TYPE OF WELL:

OIL  
WELL ☐GAS  
WELL ☒DRY ☐

Other \_\_\_\_\_

2. TYPE OF COMPLETION:

NEW  
WELL ☒WORK  
OVER ☐DEEP  
EN ☐PIPL  
BACK ☐DIFF.  
ENVR. ☐

Other \_\_\_\_\_

3. NAME OF OPERATOR

Lone Mountain Production Company

4. ADDRESS OF OPERATOR

P. O. Box 3394, Billings, Montana 59103

5. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*

At surface 1230' FSL, 1896' FWL

At top prod. interval reported below Same

At total depth Same

14. PERMIT NO.

43-019-31359

DATE ISSUED

5/19/97

15. DATE SPUDDED

9/2/97

16. DATE T.D. REACHED

9/30/97

17. DATE COMPL. (Ready to prod.)

10/7/97

18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\*

6318' KB 6307' GL

19. ELEV. CASINGHEAD

6309'

20. TOTAL DEPTH, MD &amp; TVD

4995'

21. PLUG, BACK T.D., MD &amp; TVD

4931'

22. IF MULTIPLE COMPL.,  
HOW MANY\*23. INTERVALS  
DRILLED BY

ROTARY TOOLS

CABLE TOOLS

0-TD

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*

4563' - 4692' Dakota

25. WAS DIRECTIONAL  
SURVEY MADE

No

26. TYPE ELECTRIC AND OTHER LOGS RUN

FDC/CNL/GR DIL/GR CBL/GR 10-6-97

27. WAS WELL CORED

No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9-5/8"	36#	337'	12-1/4"	505 sx. Class "G"	-----
4-1/2"	10.5#	4978'	7-7/8"	225 sx. 10-0 Thixotropic	-----

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2-3/8"	4686'	None

31. PERFORATION RECORD (Interval, size and number)

1-.36" dia. hole @ 4574', 4592', 4600',  
4615', 4621', 4648', 4653', 4661', 4664',  
4674', 4686', 11 shots total.

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
4563'-4692'	500 gallon 7 1/2" MSR
4563'-4692'	Fract with 100,000# 20-40 sand
	819 bbls. X-linked Borate Fluid

33.\* PRODUCTION

DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or shut-in)	
11/6/97		Flowing				SI-WOPL	
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BSL.	GAS—MCF.	WATER—BSL.	GAS-OIL RATIO
11/7/97	24	3/8"	→		589		
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BSL.	GAS—MCF.	WATER—BSL.	OIL GRAVITY-API (CORR.)	
169 psig	240 psig	→		589			

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

Vented

TEST WITNESSED BY

Joe Dyk

35. LIST OF ATTACHMENTS

None

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

TITLE

President

DATE

11/11/97

\*(See Instructions and Spaces for Additional Data on Reverse Side)

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof, cored intervals, and all drill-stem, tests, including depth interval tested, cushion used, flowing and shut-in pressures, and recoveries):

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Dakota	4563'	4576'	Tight Gas
Dakota	4588'	4624'	Tight Gas
Dakota	4640'	4692'	Tight Gas
Morrison	4814'	4820'	Gas

# GEOLOGIC MARKERS

38.

NAME	MEAS. DEPTH	TOP	VERT. DEPTH
Castlegate	988'		+5330'
Mancos	1116'		+5202'
Dakota Silt	4466'		+1852'
Dakota Sand	4563'		+1775'
Morrison	4750'		+1568'



# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt  
Governor

Ted Stewart  
Executive Director

James W. Carter  
Division Director

1594 West North Temple, Suite 1210

Box 145801

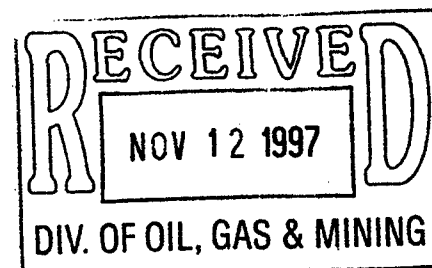
Salt Lake City, Utah 84114-5801

801-538-5340

801-359-3940 (Fax)

801-538-7223 (TDD)

RECEIVED NOV - 7 1997



November 4, 1997

Mr. James Routson  
Lone Mountain Production Company  
P. O. Box 3394  
Billings, Montana 59103

*Also enclosed are  
Utah State #3 &  
Valentine #4 logs  
13 019 31359  
16S 25E 34  
DRL*

Re: Federal # 23, API No. 43-019-31347  
Submittal of Electric and Radioactivity Logs

Dear Mr. Routson:

We have received the Compensated Density Compensated Neutron Gamma Ray and Dual Induction Guard Log Gamma Ray Logs for the above referenced well. However, the Well Completion Report indicates that a **CBL/GR Log** was also run. Please submit a copy of that log to our office as soon as possible.

Your help in this matter will be greatly appreciated. If you have questions regarding this request, please contact me at (801) 538-5279.

Sincerely,

Vicky Dyson  
Production Group Supervisor

cc: Log File



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN  
TRIPLICATE\*  
(Other Instructions on  
reverse side)

Form Approved.  
Budget Bureau No. 1004-0135  
Expires : March 31, 1993

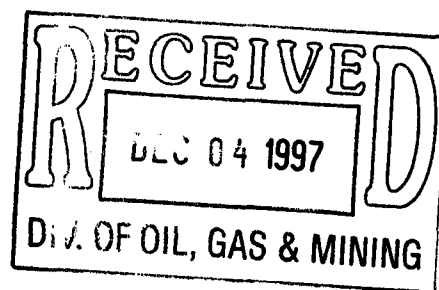
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT-" for such proposals		5. LEASE DESIGNATION AND SERIAL NO. <b>U-38276</b>
<b>SUBMIT IN TRIPLICATE</b>		6. IF INDIAN, ALLOTEE OR TRIBE NAME
b. TYPE OF WELL OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/> WELL <input type="checkbox"/> WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> ZONE <input type="checkbox"/> ZONE <input type="checkbox"/>		7. IF UNIT OR CA, AGREEMENT DESIGNATION <b>CR-38</b>
2. NAME OF OPERATOR <b>Lone Mountain Production Company</b>		8. WELL NAME and No. <b>Valentine Federal No. 4</b>
3. ADDRESS OF OPERATOR <b>P. O. Box 3394, Billings, Montana 59103 (406) 245-5077</b>		9. API WELL NO. <b>43-019-31359</b>
4. LOCATION OF WELL (Footage, Sec. T., R., M., or Survey Description) <b>1230' FSL, 1896' FWL Section 34-T16S-R25E (SESW)</b>		10. Field and Pool, or Exploratory Area <b>San Arroyo</b>
		11. County or Parish, State <b>Grand County, Utah</b>

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> Notice of Intent <input type="checkbox"/> Subsequent Report <input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Abandonment <input type="checkbox"/> Recompletion <input type="checkbox"/> Plugging Back <input type="checkbox"/> Casing Repair <input type="checkbox"/> Altering Casing <input checked="" type="checkbox"/> Other <u>Report of 1st Production</u>	<input type="checkbox"/> Change of Plans <input type="checkbox"/> New Construction <input type="checkbox"/> Non-Routine Fracturing <input type="checkbox"/> Water Shut-Off <input type="checkbox"/> Conversion to Injection <input type="checkbox"/> Dispose of Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log Form)

13. Describe the Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If a well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Initial production of the Valentine Federal No. 4 well into the Wildhorse Mesa pipeline began at 6:00 p.m., 11/26/97.

SICP and SITP 240 psi, initial rate 201 MCFD.



14. I hereby certify that the foregoing is true and correct.

Signed: James R. Barth

Title: **President**

Date: **December 2, 1997**

(This space for Federal or State office use)

APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_  
CONDITIONS OF APPROVAL IF ANY

Title 18 U.S.C. Section 1001, make it a crime for any person knowingly and willfully to make any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*See Instructions of Reverse Side